

<b>Interview Summary</b>	Application No. <u>091749,819</u>	Applicant(s)	
	Examiner <u>WES TUCKER</u>	Art Unit <u>2623</u>	<u>#16</u>

All participants (applicant, applicant's representative, PTO personnel):

- (1) Suminder Sachar 34.423 (3) WES TUCKER PTO  
 (2) Edward Tracy 47998 (4) Amelia Au PTO

Date of Interview: 3-4-04

Type: a) ☐ Telephonic b) ☐ Video Conference  
 c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
 If Yes, brief description: \_\_\_\_\_

Claim(s) discussed: 1, 6, 11

Identification of prior art discussed: \_\_\_\_\_

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: DISCUSSED PROPOSED AMENDMENT TO OVERCOME PRIOR ART, REDUCTION, REQUIRES NOW SEARCH AND CONSIDERATION

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Wes Tucker  
 Examiner's signature, if required

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An image processing apparatus comprising:

*FOR SCANNING DOCUMENT* 516.1 101  
a sensor board unit arranged to receive image data based on an original image;  
an arithmetic processing unit which processes said image data to create a reproduction  
of said original image, being a digital signal prepared based on an image, as a manifest

image, said arithmetic processing unit including,

an arithmetic processing section of SIMD (Single Instruction Multiple Data stream)  
type that can process a plurality of image data at the same time;

a plurality of memories connected to said arithmetic processing section; and

a memory controller which controls each of said memories, and

an image writing unit arranged to transfer said reproduction of said original image to a  
document. 546.1 104

wherein said memory controller controls transfer of image data performed between  
said memory and said arithmetic processing section.

Claim 2 (Original): The image processing apparatus according to claim 1, wherein  
said memory controller is connected to a control register, and said control register has a data  
transfer mode setting function for setting the data transfer mode of the memory connected to  
the memory controller.

Claim 3 (Original): The image processing apparatus according to claim 2, wherein  
said controller register changes over setting of a random access mode in which an address is  
set to access the memory, and setting of an automatic access mode in which an address is  
automatically updated to access the memory, in accordance with a control signal provided  
from outside.

Claim 4 (Original): The image processing apparatus according to claim 2, wherein said control register reads data redundantly from said memory, in accordance with a control signal provided from outside, and sets a redundant readout transfer mode for transferring data to said arithmetic processing section.

Claim 5 (Original): The image processing apparatus according to claim 2, wherein said control register reads data from said arithmetic processing section by thinning out, in accordance with a control signal provided from outside, and sets a thinning-out read transfer mode for transferring data to said memory.

Claim 6 (Currently Amended): An image processing apparatus comprising:  
a sensor board unit arranged to receive image data based on an original image;  
an arithmetic processing means for processing said image data to create a  
reproduction of said original image, being a digital signal prepared based on an image, as a  
manifest image, said arithmetic processing means including,  
an arithmetic processing section of SIMD (Single Instruction Multiple Data stream)  
type that can process a plurality of image data at the same time;  
a plurality of memories connected to said arithmetic processing section; ~~and~~  
a memory controller for controlling each of said memories, and  
an image writing unit arranged to transfer said reproduction of said original image to a  
document,  
wherein said memory controller controls transfer of image data performed between  
said memory and said arithmetic processing section.

Claim 7 (Original): The image processing apparatus according to claim 6, wherein said memory controller is connected to a control register, and said control register has a data transfer mode setting function for setting the data transfer mode of the memory connected to the memory controller.

Claim 8 (Original): The image processing apparatus according to claim 7, wherein said controller register changes over setting of a random access mode in which an address is set to access the memory, and setting of an automatic access mode in which an address is automatically updated to access the memory, in accordance with a control signal provided from outside.

Claim 9 (Original): The image processing apparatus according to claim 7, wherein said control register reads data redundantly from said memory, in accordance with a control signal provided from outside, and sets a redundant readout transfer mode for transferring data to said arithmetic processing section.

Claim 10 (Original): The image processing apparatus according to claim 7, wherein said control register reads data from said arithmetic processing section by thinning out, in accordance with a control signal provided from outside, and sets a thinning-out read transfer mode for transferring data to said memory.

Claim 11 (Currently Amended): An image processing method to be executed by an image processing apparatus, said image processing apparatus including an SIMD type arithmetic processing section for processing a plurality of image data, being digital signals prepared based on an image, at the same time; a plurality of memories connected to said arithmetic processing section; and a memory controller for controlling each of said memories, the method comprising:

receiving said image data from a sensor board unit arranged to receive image data based on an original image;

an image data control step for controlling transfer of image data, performed between said memory and said arithmetic processing section, by said memory controller; and, transferring a reproduction of said original image to a document.

Claim 12 (Original): The image processing method according to claim 11, wherein said image data control step includes a data transfer mode setting step for setting data transfer mode of memories connected to the memory controller.

Claim 13 (Original): The image processing method according to claim 11, wherein said image data control step is for changing over setting of a random access mode in which an address is set to access the memory, and setting of an automatic access mode in which an address is automatically updated to access the memory, in accordance with a control signal provided from outside.

Claim 14 (Original): The image processing method according to claim 11, wherein said image data control step is for reading data redundantly from said memory, in accordance with a control signal provided from outside, and setting a redundant readout transfer mode for transferring the data to said arithmetic processing section.

Claim 15 (Original): The image processing method according to claim 11, wherein said image data control step is for reading data from said arithmetic processing section by thinning out, in accordance with a control signal provided from outside, and setting a thinning-out read transfer mode for transferring the data to said memory.

Claim 16 (Currently Amended): A computer readable medium for storing instructions, which when executed by a computer, causes the computer to perform an image processing method to be executed by an image processing apparatus, said image processing apparatus including an SIMD type arithmetic processing section for processing a plurality of image data, being digital signals prepared based on an image, at the same time; a plurality of memories connected to said arithmetic processing section; and a memory controller for controlling each of said memories , the method comprising:

receiving said image data from a sensor board unit arranged to receive image data based an original image;

an image data control step for controlling transfer of image data, performed between said memory and said arithmetic processing section, by said memory controller; and,  
transferring a reproduction of said original image to a document.

REMARKS/ARGUMENTS

As stated above, the present draft amendment is provided solely to facilitate prosecution and is not intended to be placed in the record.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)

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Gregory J. Maier  
Attorney of Record  
Registration No. 25,599

Surinder Sachar  
Registration No. 34,423

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DOCKET NO: 201392US2

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
HIROAKI FUKUDA, ET AL. : EXAMINER: TUCKER, W. J.  
SERIAL NO: 09/749,819 :  
FILED: DECEMBER 28, 2000 : GROUP ART UNIT: 2623  
FOR: METHOD AND APPARATUS FOR :  
IMAGE PROCESSING, AND A  
COMPUTER PRODUCT

PROPOSED AMENDMENT

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

This paper is a draft amendment and is not intended to be placed in the record.